

# Rockville City Police



## Safe Speed Program Evaluation

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# **Rockville City Police Safe Speed Program Evaluation**

## **Introduction**

The National Highway Traffic Safety Administration (NHTSA) reported more than 13,500 lives lost in 2006 due to speed-related crashes. Although speeding is often associated with interstates and other high-speed roads, the Insurance Institute for Highway Safety (IIHS) reports that nearly 90 percent of speed-related fatalities occur on roads other than interstate highways. In 2006, almost one quarter (23 percent) of speed-related fatalities occurred on streets with speed limits of 35 miles per hour (mph) or less. Excessive speeding remains a major public safety risk.

Photo speed camera programs combine several pieces of equipment that have been used by police agencies for decades – a high-speed traffic camera, Doppler radar and computer monitoring equipment. The speed camera unit itself consists of a low power, narrow beam, Doppler radar antenna aimed at a 20-degree angle across a road. The camera units are able to calibrate accurate speed measurements on roadways up to five lanes wide. The cameras can either be mounted on a vehicle or to a fixed pole. A mobile system can be moved around to different pre-determined enforcement sites for a short period of time. Fixed-camera sites operate around the clock from a single location.

The radar equipment used in the photo speed camera program detects vehicles that are exceeding a pre-selected threshold speed (10 mph) above the speed limit. If a vehicle is traveling faster than the threshold speed, then it will trigger a camera linked to the radar equipment. The first photo takes a picture of the back of the violator's vehicle; a second picture, taken a fraction of a second later, will photograph the violator's license plate. Each photograph will have the date, time, speed and location noted.

Automated photo speed enforcement systems are an important element in speed management and can be an effective countermeasure to prevent speed-related crashes. Speed monitoring systems supplement traditional enforcement operations. They also provide law enforcement agencies the ability to continuously enforce the speed limit; reduce traffic congestion that is sometimes caused by secondary driver distraction at police/citizen traffic stops; improve traffic flow; and reduce congestion. The use of automated photo speed enforcement does not eliminate the need for personnel. In fact, automated speed enforcement technology requires the hiring of trained personnel to set up, maintain and monitor the equipment.

This report will detail the administration of Rockville's Safe Speed Program and the effectiveness of the program. It will also explain how the City is spending any revenue generated by the program.

## **Background**

For the past decade, the City of Rockville has identified pedestrian access and safety as one of its top priorities. The City has implemented several programs to encourage safe driving behavior, including the installation of red-light cameras and traffic calming devices. In conjunction with Montgomery County, the City supported the state legislation allowing the Rockville City Police Department to use photo radar cameras to enforce speed laws.

In January 2006, the Maryland General Assembly authorized the use of speed monitoring systems throughout Montgomery County. The state legislation authorizes the use of photo-radar speed monitoring systems on residential streets and in school zones, where the posted speed limit is 35 miles per hour or less. Vehicle owners are subject to a \$40 non-moving violation citation if the vehicle speed exceeds the posted limit by more than 10 mph. The citation is a civil penalty and is treated as a non-moving violation. The civil penalty is not recorded on the owner's driving record by the state Motor Vehicle Administration, no "points" are assigned and insurance providers are not notified. Through provisions in a Memorandum of Understanding (MOU) with the county, the county processes citations that are issued by the City of Rockville. Revenues from the citations are then remitted back to the City.

The ultimate goal of any traffic safety program is to save lives and prevent injuries. However, there are several other goals and benefits of the Safe Speed Program.

- Reduce speed in residential neighborhoods and school zones.
- Change driver behavior through voluntary compliance with traffic laws.
- Educate the public and increase public awareness.
- Reduce accident severity and the financial impact on the economy.
- Augment the efforts of traditional law enforcement.
- Reduce energy consumption.

## **Program Administration**

The Photo Enforcement Unit is commanded by a police captain and supervised by a civilian staff member. In addition to the supervisor, there are four photo technicians. All members of the unit are cross trained to operate the mobile devices, calibrate fixed pole units, approve both red light and speed camera citations, testify in court and handle customer service inquiries. To maximize deployments, photo technicians work a rotating shift, five days per week, in addition to one shift every Saturday. Two employees work an early morning shift and two employees work an afternoon shift. The supervisor of the unit works normal business hours. Each employee works a 7.5-hour shift, five days per week. Employees rotate Mondays off, but then work that Saturday.

Between 2004 and 2006 the City of Rockville's Traffic and Transportation Division conducted several speed surveys on City streets. The surveys were conducted at the request of the Police Department and other departments within the City, usually as a result of a citizen complaint about traffic-related issues (speeding, cut through traffic, etc.). The Traffic and Transportation Division compiled these surveys into "the 50 worst speeding locations in Rockville."

The City Police Department used "the 50 worst speeding locations" data to assist in site selection. We narrowed the list of the worst roadways down to 25 by identifying roadways that meet the criteria of the law (residential roadway, 35 miles per hour or less or in a school zone). Rockville solicited City residents to serve on a Citizens Advisory Committee, and seven residents from across the City volunteered. The Citizen Advisory Committee met with police officials and visited all the sites in order to prioritize them. Several factors were taken into consideration during the site visits.

- Traffic Volumetrics
- Proximity to Pedestrian Crossings
- Proximity to School(s)

Proximity to Parks/Playgrounds  
85<sup>th</sup> Percentile Speed  
Accident Statistics  
Sidewalks Present  
Roadway Design  
Other Factors

The Citizen Advisory Committee identified 15 sites as the original photo speed enforcement zones.

In March 2007, Montgomery County launched a public awareness and education campaign regarding speed-monitoring systems. The county's campaign consisted of press releases, signs and the creation and maintenance of a logo and Web site. The City of Rockville initiated its own parallel campaign during the same time period. The City's campaign included issuing press releases, posting warning signs, producing monthly announcements on Rockville Channel 11 and in Rockville Reports, sending fliers to neighborhood and civic organizations, and creating and maintaining a Web site. Both campaigns reached Rockville residents and provided a substantial period of notification.

Rockville's Safe Speed Program has been implemented in two phases.

#### Phase One

On March 13, 2007, the Rockville City Police Department began phase one of the program by issuing warning notices. After a 50-day warning period, the department began issuing citations to violators on May 2, 2007. Initially, the program relied on one mobile photo radar unit to be deployed to 18 different locations on nine different roadways. By August 2007, a second mobile unit was added to the program. On Sept. 1, 2007, fixed camera units were installed and began operating in front of Rockville High School and Wootton High School. On June 2, 2008, fixed-camera units became operational on West Montgomery Avenue. The mobile units were deployed approximately 18 hours per day from 6 a.m. to 11 p.m. Although a majority of enforcement takes place during the weekdays, units are routinely deployed on the weekends. Mobile units normally operate at a site for a three-hour period before rotating to a new site.

#### Phase Two

During the fall of 2008, the Photo Enforcement Unit began site selection for phase two of the program. Sites were selected based upon citizen complaints, speed surveys and previous citation issuance. In January 2009, 34 additional mobile sites were identified on 14 different roadways. In addition, four additional fixed-camera sites were installed on three roadways:

- Redland Boulevard (500 block): Eastbound and Westbound Direction
- Great Falls Road (600 block) near Julius West Middle School: Northbound Direction
- Twinbrook Parkway (700 block) near Meadow Hall Elementary School: Northbound Direction

These sites became operational on June 4, 2009. As is customary with each new site, warning notices were issued during the first two weeks of operation and violation notices were issued beginning June 19, 2009. (See attachment 1 and 2 for site locations and descriptions).

## **Program Analysis**

A successful Safe Speed Program is measured through a reduction in overall speeds, a reduction in the number of vehicles speeding, and a reduction in the number of speeding-related accidents. Due to the limited length of time mobile units operate at any given site (maximum three hours), specific portions of this report focus on data collected from the fixed camera sites. No data was analyzed for sites implemented during phase two of the program due to the short time the sites were operational at the time of this writing. The data analyzed encompasses the first full month a site was operational and the last full month of data collected (April 2009). In most cases this was 20 full months of data for our sites.

### Mean and Median Speeds

One of the successes of the program is a measured reduction in speed. Prior to implementation of the program, speed surveys were conducted at each site. These surveys were conducted over the course of several days to provide sufficient data for a baseline measurement. Both fixed and mobile photo radar units are equipped to measure median and mean speed of all the vehicles driving through a location in any specified period of time. A mean speed is defined as the average of all speeds. A median speed is defined as the middle speed (all speeds are placed in order from lowest to highest and the value in the middle is the median). Attachment 3 compares the mean and median speeds at the fixed camera sites in the program.

Data from the fixed pole sites indicate a decrease in mean speeds for all fixed-camera locations. In all locations, the post implementation mean speeds of vehicles were actually below the posted speed limits. At the West Montgomery Avenue site (eastbound direction) we experienced a 13.4 mph reduction in the mean speed (-37 percent). We had similar success on the same roadway going in the westbound direction with an 11.2 mph reduction mean speed (-32 percent). Overall, the Safe Speed Program has seen a 12 percent reduction in mean speeds at our fixed-site locations (see attachment 4).

Our mobile sites have also shown reductions in mean speeds. However, due to the limited length of time the mobile units deploy at any given site, data from these sites may lead to inconclusive or erroneous conclusions.

An analysis of vehicle speeds was completed for each camera site location from the program's inception through April 30, 2009 (see attachment 5). Vehicle speeds were broken down into 10 mph speed brackets. Due to the fact that our camera systems capture these speeds, only fixed-camera sites were analyzed. Overall, one percent of the motorists passing our cameras were exceeding the posted speed limit by more than 11 mph. The road with the highest percentage of speeders was Baltimore Road. On this road, 1.40 percent of the passing vehicles were exceeding the speed limit by 11 mph or more. The majority of speeding violations are captured in the 11–19 mph over the posted speed limit range.

### Citations Issued

As expected, the number of citations issued peaked with the initial start of the program and has steadily declined since then. In October 2007, one full month after the installation of four fixed-camera units, the City's four fixed-camera sites produced 3,239 citations. During the last full month (April 2009) that data was analyzed, the six fixed-camera sites in the City's program produced a total of 439 citations. This is an 86 percent reduction in the number of citations issued at fixed-camera sites, even though the number of camera locations increased from four to six (see attachment 4).

Mobile site locations experienced similar trends. There usually is a spike in the number of citations issued when a new site is identified. Most of our mobile sites are located on residential streets and once local commuters are aware of the enforcement zones, they tend to obey the speed limit. As a result, the numbers of violations decrease and the Photo Enforcement Unit can then direct attention to other enforcement locations.

The cumulative number of citations will continue to vary as new sites are identified and added for enforcement. The additional four fixed-camera sites that operate 24 hours a day may result in a temporary “spike” in citations during the initial enforcement period. Despite the fluctuations of citations at each site, the overall number of citations appears to have “flattened out” (see attachment 6).

Between May 2, 2007, and April 30, 2009, the Rockville City Police Department’s Safe Speed Program has issued 148,039 citations. Less than 1 percent of the violations have been contested in District Court, and one individual has appealed their case to Circuit Court.

#### Traffic Accidents by Location

The Rockville City Police Department compiled accident data from site locations for a one-year period prior to the implementation of the photo enforcement technology. Accident data was collected for a linear half-mile distance of each camera location site. Data from pre-implementation and one-year intervals after that time are presented in attachment 7. The decrease in overall accidents may be an indication of the impact of the Safe Speed Program.

According to the data, there has been a 35 percent decrease in the total number of accidents at sites monitored by the speed cameras since the program first began. Significant decreases were experienced at the Mt. Vernon Place site near Richard Montgomery High School (100 percent reduction) and the Twinbrook Road location near Meadow Hall Elementary School (63 percent reduction). There was a slight increase in the number of accidents at some site locations. Overall, the City experienced a seven percent reduction in the total number of traffic collisions reported during the Safe Speed Program evaluation period.

### **Speed Camera Revenue**

The City of Rockville believes that it is following a strict interpretation of the law on how speed camera revenues can be spent. Because revenues are restricted, the City has created a special revenue fund to accurately track revenues and expenditures associated with the program (see attachment 8). Revenues in excess of operating costs are available to enhance traffic and pedestrian safety programs and projects in the operating budget and in the Capital Improvements Program (CIP) budget (see attachment 9).

The information in attachments 8 and 9 contains a breakdown of the FY 2007, FY 2008 and FY 2009 Speed Camera Fund actual and estimated operating expenditures, and revenues by major expenditure category and revenue source. The FY 2009 estimated actual expenditures include the actual operating costs of the program, 7.0 positions (2.0 Police Officers for traffic enforcement, 4.0 Photo Enforcement Analysts, 0.5 Photo Enforcement Supervisor and 0.5 Civil Engineer for sidewalk design), as well as a pedestrian safety consultant study to assess the City of Rockville's inventory and condition of sidewalks, crosswalks and curb cuts.

In addition to the FY 2009 Operating Budget, there are four major projects included in the FY 2009 CIP budget that utilize Speed Camera funds. These projects are detailed below:

- Pedestrian Bikeway System Improvements – (\$1,010,000) This project addresses the safety concerns of pedestrians and bicyclists who use the Sister City Friendship Bridge on a daily basis. Funds will be used to install security lighting along the bridge and the construction of a pedestrian pathway from Crofton Hill to Darnestown Road.
- Pedestrian Safety – (\$320,000) This project funds feasibility analyses for new pedestrian initiatives; construction of sidewalks and bicycle pathways; implementation of a Safe Routes to School program; implementation of pedestrian traffic control devices; and plans for future facilities to support walking and biking. Projected sidewalk costs fund the construction of 62 miles of missing sidewalks as determined by the sidewalk prioritization criteria.
- Street Lighting Improvements – (\$100,000) The project funds improvements to existing lighting systems where problems or safety issues have been identified. Funding is primarily for underground-wired lights. However, some funds are allocated to upgrade overhead streetlights owned and operated by the local utility company in the vicinity of schools, Metro stations and some residential areas where the illumination is poor. Adequate lighting is needed on public streets to enhance traffic and pedestrian safety and to help provide security.
- Vehicles for City Use – (\$104,540) This project funds the purchase of one police vehicle for traffic enforcement and one bucket truck for street signal and traffic light repair in FY 2009.

## Conclusion

The City of Rockville's Safe Speed Program has been very effective in lowering the average speed of vehicles, reducing the number of vehicles speeding and lowering the number of accidents on roadways within the City.

During 20 full months of operations, Rockville's fixed pole sites have seen:

- The average speeds of vehicles lowered by 12 percent;
- The number of citations reduced by 86 percent; and
- The cumulative number of accidents at all camera sites reduced by 35 percent.

Some critics of the program may attribute these reductions to a lower number of vehicle miles traveled due to gas prices and the economy in addition to other factors. Our analysis indicates that there was an average 3 percent reduction in the volume of traffic passing our fixed pole sites. This is similar to the Federal Highway Administration (FHWA) annual report, which reported a 3.6 percent decline in vehicle miles traveled during 2008. John Townsend, AAA Mid-Atlantic's Manager of Public and Government Affairs, reports that vehicle miles traveled in the Washington metropolitan area fluctuates from month to month and state by state (MD, VA and DC). However, the percentages of traffic volumes experienced by Rockville's Safe Speed Program were consistent with the region.

Rockville's Safe Speed Program has allowed the City to hire two new police officers solely dedicated to traffic enforcement. The program has also freed up officers to address other problems such as drunk drivers or high accident roadways not covered by the law. This is an excellent program for the taxpayers since they receive enhanced public safety services and a traffic safety program that is paid for by the violators.

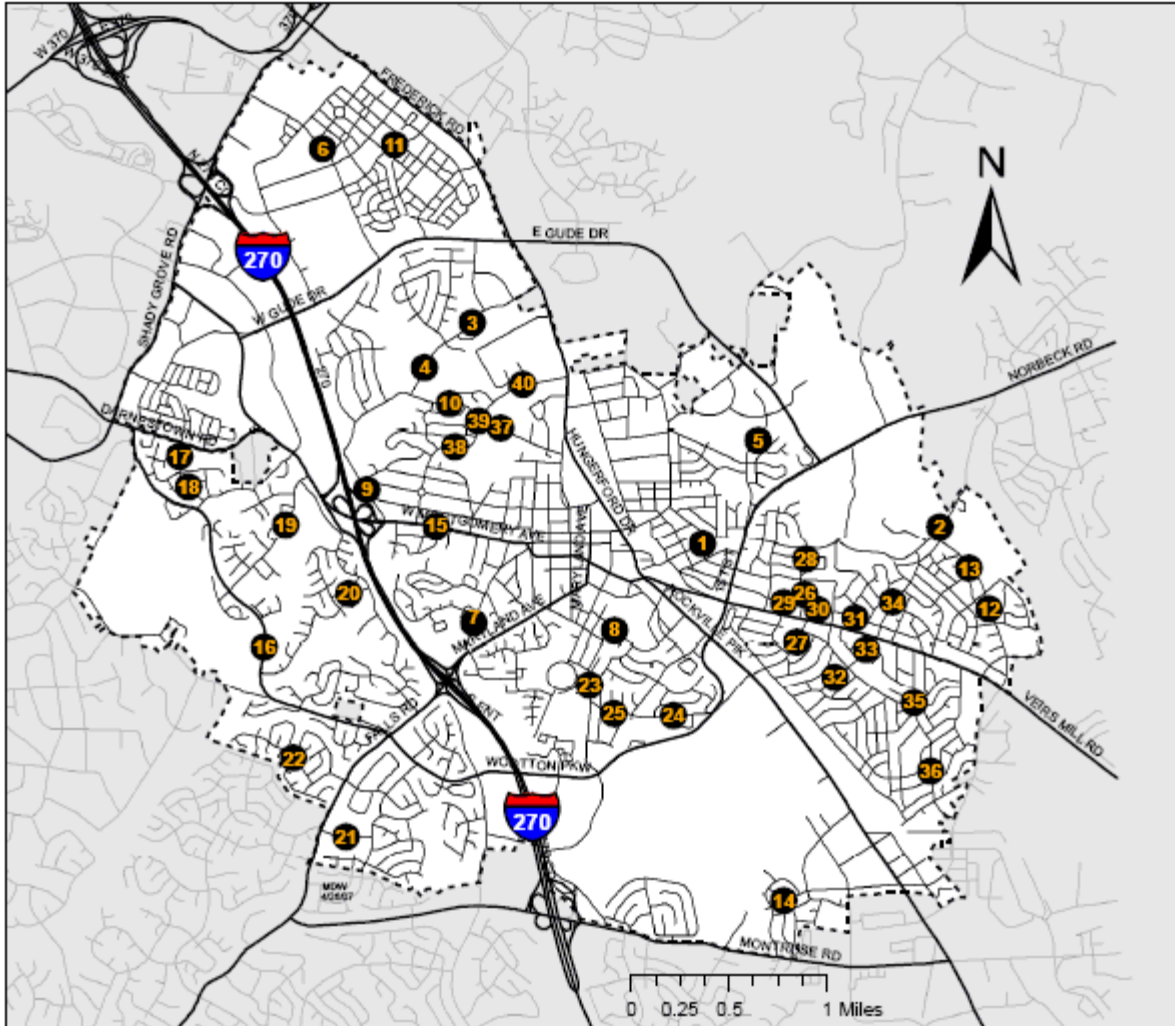
The Rockville City Police Department expects to see the same successes and results during phase two of the program as we experienced during phase one of the program.

Legislation passed in 2009 will alter the City's Safe Speed Program slightly. The new law, which takes effect Oct. 1, 2009, will place more stringent restrictions on the program. The first change will increase the threshold speed from 10 mph to 11 mph over the speed limit. This will mean that a photo enforced speed citation could not be issued until the motorist is traveling 12 mph over the posted speed limit. In addition, cameras placed in school zones will only be operational from 6 a.m. to 8 p.m., Monday through Friday (no overnight or weekend enforcement). The new legislation allows each jurisdiction the option of collecting its own revenue. The City is closely examining this option.

Due to the hard work of all involved in the Safe Speed Program, including the support provided by the Rockville Mayor and Council, Rockville has seen a dramatic positive change in driving behavior of motorists on City roadways. More motorists are obeying the posted speed limits. There has been a significant reduction in collisions at or near our camera locations. There has also been a dramatic decrease (86 percent) in the number of citations issued. Rockville's Safe Speed Program is rated as "highly successful."



**Attachment 1**  
**Rockville Safe Speed Program**  
**Camera Location Map**



**Attachment 2**  
**Rockville Safe Speed Program**  
**Camera Site Location Data**

Location #	Road Name	Block	Direction	Speed Limit	Number of Lanes	School Zone or Residential District?	Fixed or Mobile?	Active date
<b>Mobile Sites</b>								
2001	700 Blk Twinbrook Pkwy	700	N/b	25	1	Residential	Mobile	03/12/07
2002	500 Blk Great Falls Rd	500	S/b	30	1	Residential	Mobile	03/12/07
2011	400 Blk Twinbrook Pkwy	400	N/b	25	1	Residential	Mobile	03/12/07
2012	700 Blk Twinbrook Pkwy	700	S/b	25	1	Residential	Mobile	03/12/07
2013	600 Blk Nelson Street	600	E/b	25	1	Residential	Mobile	03/12/07
2014	600 Blk Nelson Street	600	W/b	25	1	Residential	Mobile	03/12/07
2021	200 Blk Nelson Street	200	N/b	25	1	Residential	Mobile	03/12/07
2022	400 Blk Twinbrook Pkwy	400	S/b	25	1	Residential	Mobile	03/12/07
2023	400 Blk College Pkwy	400	E/b	25	1	Residential	Mobile	03/12/07
2024	300 Blk Baltimore Road	300	W/b	25	1	Residential	Mobile	03/12/07
2031	800 Blk College Pkwy	800	N/b	25	1	Residential	Mobile	03/12/07
2032	500 Blk Mt. Vernon Place	500	S/b	25	1	Residential	Mobile	03/12/07
2033	300 Blk Baltimore Road	300	E/b	25	1	Residential	Mobile	03/12/07
2034	600 Blk Rollins Avenue	600	W/b	25	1	Residential	Mobile	03/12/07
2041	1000 Blk First Street	1000	N/b	25	1	Residential	Mobile	03/12/07
2042	1000 Blk Gaither Road	1000	S/b	30	1	Residential	Mobile	03/12/07
2043	600 Blk Rollins Avenue	600	E/b	25	1	Residential	Mobile	03/12/07
2051	500 Blk Mt. Vernon Place	500	N/b	25	1	Residential	Mobile	03/12/07
2081	2100 Blk Wootton Pkwy	2100	N/b	25	1	School Zone	Mobile	03/30/07
2100	2900 Blk Glenora Lane	2900	N/b	25	1	Residential	Mobile	01/05/09
2101	2800 Blk Glenora Lane	2800	S/b	25	1	Residential	Mobile	01/05/09
2102	400 Blk Hurley Avenue	4400	N/b	25	1	Residential	Mobile	01/05/09
2103	400 Blk Hurley Avenue	400	S/b	25	1	Residential	Mobile	01/05/09
2104	1400 Blk Gerard Street	1400	N/b	25	1	Residential	Mobile	01/05/09
2105	1400 Blk Gerard Street	1400	S/b	25	1	Residential	Mobile	01/05/09
2106	1500 Blk Dunster Road	1500	E/b	25	1	Residential	Mobile	01/05/09
2107	1500 Blk Dunster Road	1500	W/b	25	1	Residential	Mobile	01/05/09
2108	1700 Blk Sunrise Drive	1700	N/b	25	1	Residential	Mobile	01/05/09
2109	1700 Blk Sunrise Drive	1700	S/b	25	1	Residential	Mobile	01/05/09
2110	700 Blk Cabin John Pkwy	700	N/b	25	1	Residential	Mobile	01/05/09
2112	700 Blk W. Edmonston Drive	700	W/b	25	1	Residential	Mobile	01/05/09
2113	200 Blk W. Edmonston Drive	200	E/b	25	1	Residential	Mobile	01/05/09
2114	300 Blk W. Edmonston Drive	300	W/b	25	1	Residential	Mobile	01/05/09
2115	1200 Blk Edmonston Drive	1200	E/b	25	1	Residential	Mobile	01/05/09
2116	1200 Blk Edmonston Drive	1200	W/b	25	1	Residential	Mobile	01/05/09

**Attachment 2  
(Continuation)  
Rockville Safe Speed Program  
Camera Site Location Data**

<b>Location #</b>	<b>Road Name</b>	<b>Block</b>	<b>Direction</b>	<b>Speed Limit</b>	<b>Number of Lanes</b>	<b>School Zone or Residential District?</b>	<b>Fixed or Mobile?</b>	<b>Active date</b>
2117	500 Blk Edmonston Drive	500	N/b	25	1	Residential	Mobile	01/05/09
2118	300 Blk Edmonston Drive	300	W/b	25	1	Residential	Mobile	01/05/09
2119	1000 Blk Grandin Avenue	1000	S/b	25	1	Residential	Mobile	01/05/09
2120	1100 Blk Grandin Avenue	1100	N/b	25	1	Residential	Mobile	01/05/09
2121	1300 Blk Grandin Avenue	1300	S/b	25	1	Residential	Mobile	01/05/09
2122	300 Blk Broadwood Drive	300	N/b	25	1	Residential	Mobile	01/05/09
2123	300 Blk Broadwood Drive	300	S/b	25	1	Residential	Mobile	01/05/09
2124	1200 Blk Broadwood Drive	1200	N/b	25	1	Residential	Mobile	01/05/09
2125	1500 Blk Broadwood Drive	1500	S/b	25	1	Residential	Mobile	01/05/09
2126	12000 Blk Ardennes Avenue	12000	S/b	25	1	Residential	Mobile	01/05/09
2127	13000 Blk Ardennes Avenue	13000	S/b	25	1	Residential	Mobile	01/05/09
2128	500 Blk Falls Grove Drive	500	E/b	25	1	Residential	Mobile	01/05/09
2129	500 Blk Falls Grove Drive	500	W/b	25	1	Residential	Mobile	01/05/09
2132	Unit Blk Mannakee Street	50	S/b	25	1	Residential	Mobile	01/05/09
2133	500 Blk Mannakee Street	500	N/b	25	1	Residential	Mobile	01/05/09
2134	600 Blk Mannakee Street	600	S/b	25	1	Residential	Mobile	01/05/09
2135	300 Blk Martins Lane	300	E/b	25	1	Residential	Mobile	01/05/09
2136	300 Blk Martins Lane	300	W/b	25	1	Residential	Mobile	01/05/09
2137	500 Blk Mannakee Street	500	S/b	25	1	Residential	Mobile	01/05/09
2138	Unit Blk Mannakee Street	50	N/b	25	1	Residential	Mobile	01/05/09
<b>Fixed Pole Sites</b>								
2052	2100 Blk Baltimore Rd	2100	S/b	25	1	School Zone	Fixed Pole	09/04/07
2091	2200 Blk Wootton Pkwy	2200	N/b	25	1	School Zone	Fixed Pole	09/04/07
2092	2200 Blk Wootton Pkwy	2200	S/b	25	1	School Zone	Fixed Pole	09/04/07
2053	500 Blk W. Montgomery Ave	500	E/b	30	1	Residential	Fixed Pole	04/12/08
2044	400 Blk W. Montgomery Ave	400	W/b	30	1	Residential	Fixed Pole	04/12/08
2201	500 Blk Redland Blvd	500	W/b	30	1	Residential	Fixed Pole	06/19/09
2202	550 Blk Redland Blvd	550	E/b	30	1	Residential	Fixed Pole	06/19/09
2203	600 Blk Great Falls Rd	600	N/b	30	1	Residential	Fixed Pole	06/19/09
2204	700 Blk Twinbrook Pkwy	700	N/b	25	1	Residential	Fixed Pole	06/19/09

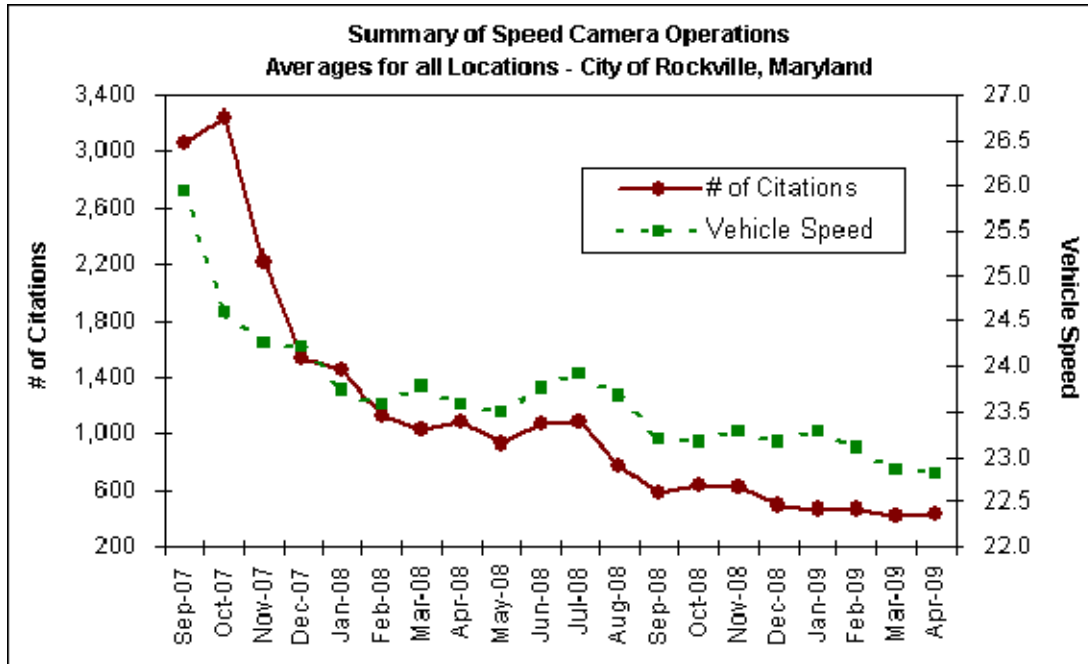
### Attachment 3

#### Rockville Safe Speed Program Mean and Median Speeds at Fixed Pole Locations (MPH)

Location	Posted Speed Limit	Pre-Implementation		Post-Implementation*		Mean % Decrease	
		Mean	Median	Mean	Median	Mean	%
Baltimore Rd (2100 Block) EB/NB	25	30.4	30.9	22.9	23.1	- 7.5	- 25%
Baltimore Rd (2100 Block) WB/SB	25	32	32.9	25.9	25.6	- 6.1	- 19%
West Montgomery Avenue EB of I-270 (400-600 Blocks)	30	36.5	28.2	23.1	22.8	- 13.4	- 37%
West Montgomery Avenue WB of I-270 (400-600 Blocks)	30	35.1	30.4	23.9	24.4	- 11.2	- 32%
Wootton Pkwy (2100 Block) NB	25	27.4	27.3	23	23.4	- 4.4	- 16%
Wootton Pkwy (2100 Block) SB	25	27.5	29.3	23.3	23.5	- 4.2	- 15%

\*Post-Implementation based on average of period from 10/1/07 to 04/30/09

**Attachment 4**  
**Rockville Safe Speed Program**  
**Citations Issued and Vehicle Speeds (mph) at Fixed Pole Locations**



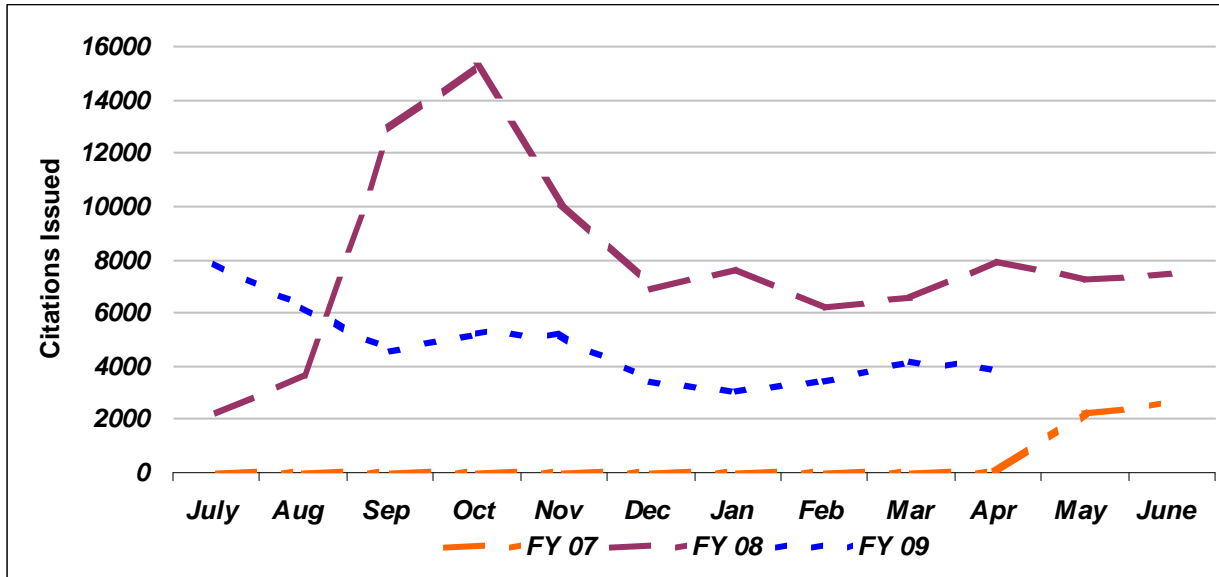
	# Of Citations	Vehicle Speed
Sep-07	3,067	26.0
Oct-07	3,239	24.6
Nov-07	2,210	24.3
Dec-07	1,543	24.2
Jan-08	1,461	23.8
Feb-08	1,135	23.6
Mar-08	1,033	23.8
Apr-08	1,086	23.6
May-08	930	23.5
Jun-08	1,070	23.8
Jul-08	1,084	23.9
Aug-08	779	23.7
Sep-08	575	23.2
Oct-08	637	23.2
Nov-08	622	23.3
Dec-08	500	23.2
Jan-09	465	23.3
Feb-09	470	23.1
Mar-09	424	22.9
Apr-09	439	22.8
<b>% Change</b>	<b>-86%</b>	<b>-12%</b>

**Attachment 5**  
**Rockville Safe Speed Program**  
**Speed Breakdown by Location**

<b>Location</b>	<b>11to 19 MPH Over posted speed limit</b>	<b>20 to 29 MPH Over posted speed limit</b>	<b>30 to 39 MPH Over posted speed limit</b>	<b>40 + MPH Over posted speed limit</b>	<b>Total Over posted speed limit</b>
Baltimore Rd (300-500 block)	2,129	71	2	0	<b>2,202</b>
College Parkway near College Gardens Park (400-500 block)	156	0	0	0	<b>156</b>
College Parkway (800-900 blocks)	1,233	43	3	0	<b>1,279</b>
First Street near Maryvale Elementary School (900-1000 blocks)	137	0	0	0	<b>137</b>
Gaither Road north of King Farm Boulevard (1000 block)	3,009	110	3	0	<b>3,122</b>
Great Falls Road near Julius West Middle School (400-500 blocks)	4,647	140	3	1	<b>4,791</b>
Mt. Vernon Place near Richard Montgomery High School (400-500 blocks)	650	24	1	0	<b>675</b>
Nelson Street north of W. Montgomery Avenue (100-200 block)	10,007	373	4	1	<b>10,385</b>
Nelson Street near Madison Street (500-600 blocks)	4,446	125	1	0	<b>4,572</b>
Rollins Avenue near Montrose Woods Park (600 block)	859	31	0	0	<b>890</b>
Twinbrook Parkway near Meadow Hall Elementary School (700-900 blocks)	2,009	49	0	0	<b>2,058</b>
Twinbrook Parkway near Carl Sandburg Learning Center	1,986	38	1	0	<b>2,025</b>
<b>TOTAL</b>	<b>31,268</b>	<b>1,004</b>	<b>18</b>	<b>2</b>	<b>32,292</b>

<b>Location</b>	<b>Vehicle Passes</b>	<b>11- 19 MPH over posted speed limit</b>	<b>20 to 29 MPH over posted speed limit</b>	<b>30 to 39 MPH over posted speed limit</b>	<b>40 + MPH over posted speed limit</b>	<b>% Of Vehicles Speeding over the posted speed limit</b>
Baltimore Rd (2100 block)	3,725,006	50,322	1,633	28	7	<b>1.40%</b>
West Montgomery Avenue E/B & W/B of I-270 (400-600 blocks)	6,398,937	13,959	389	25	7	<b>0.22%</b>
Wootton Pkwy (2100 block)	4,501,834	45,071	1,926	77	25	<b>1.05%</b>
<b>Total</b>	<b>14,625,777</b>	<b>109,352</b>	<b>3,948</b>	<b>130</b>	<b>39</b>	<b>1%</b>

**Attachment 6**  
**Rockville Safe Speed Program**  
**Citations Issued by Fiscal Year**



	FY 07	FY 08	FY 09
July	0	2225	7860
Aug	0	3702	6261
Sep	0	12897	4553
Oct	0	15226	5228
Nov	0	10121	5158
Dec	0	6921	3487
Jan	0	7681	3062
Feb	0	6268	3431
Mar	0	6619	4237
Apr	0	7988	3892
May	2220	7265	
June	2634	7524	

**Attachment 7**  
**Rockville Safe Speed Program**  
**Accidents by Location**

<b>Location</b>	<b>May 1, 2006 – April 30, 2007</b>	<b>May 1, 2007 – April 30, 2008</b>	<b>May 1, 2008 - April 30, 2009</b>
Baltimore Rd (2100 block)	6	1	2
Baltimore Rd (300-500 block)	2	4	5
College Parkway near College Gardens Park (400-500 block)	1	1	0
College Parkway (800-900 blocks)	2	0	0
First Street near Maryvale Elementary School (900-1000 blocks)	0	1	0
Gaither Road north of King Farm Boulevard (1000 block)	5	4	4
Great Falls Road near Julius West Middle School (400-500 blocks)	6	9	2
Mt. Vernon Place near Richard Montgomery High School (400-500 blocks)	4	2	0
Nelson Street north of W. Montgomery Avenue (100-200 block)	0	0	1
Nelson Street near Madison Street (500-600 blocks)	0	3	2
Rollins Avenue near Montrose Woods Park (600 block)	2	4	1
Twinbrook Parkway near Meadow Hall Elementary School (700-900 blocks)	16	9	6
Twinbrook Parkway near Carl Sandburg Learning Center	4	5	5
West Montgomery Avenue E/B & W/B of I-270 (400-600 blocks)	11	11	12
Wootton Pkwy (2100 block)	9	2	4
<b>TOTAL</b>	<b>68</b>	<b>56</b>	<b>44</b>



**Attachment 8**  
**Rockville Safe Speed Program**  
**Revenue and Expenditures**

**Speed Camera - Operating**

<b>Revenues / Sources</b>	<b>Actual FY07</b>	<b>Actual FY08</b>	<b>Estimated FY09</b>
Speed Camera Citations	81,991	4,036,564	3,100,000
Interest Income	-	24,470	35,000
<b>Total Revenues / Sources</b>	<b>81,991</b>	<b>4,061,034</b>	<b>3,135,000</b>

<b>Expenditures</b>	<b>Actual FY07</b>	<b>Actual FY08</b>	<b>Estimated FY09</b>
Personnel	48,760	158,322	370,526
Contract Services	38,149	1,336,167	1,322,637
Commodities	2,115	4,258	66,692
Capital Outlay	18,855	-	-
Other	-	-	3,000
<b>Total Operating Expenditures</b>	<b>107,879</b>	<b>1,498,747</b>	<b>1,762,855</b>

**Attachment 9**  
**Rockville Safe Speed Program**  
**Capital Improvement Programs**

**Speed Camera - CIP**

<b>Expenditures</b>	<b>Actual FY07</b>	<b>Actual FY08</b>	<b>Amended FY09</b>
Pedestrian Bikeway System Improvements	-	-	1,010,000
Pedestrian Safety	-	-	320,000
Street Lighting Improvements	-	-	100,000
Vehicles for City Use	-	-	104,540
<b>Total Operating Expenditures</b>	<b>-</b>	<b>-</b>	<b>1,534,540</b>